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MESSAGE: U.S. Application Serial No. 10/643,516.
Exhibit "B" to accompany Amendment filed April 30, 2008.

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MacroSolve
data collection solutions...

Bama Companies, Inc.
Field Service Survey Application

Technical Design

Version 1.3
August 30, 2001

Document: BAMA Technical Design.doc

Application No. 10/643,516
Applicant: J. David Payne
Tc/A.U.: 2151
Examiner: TRAN, NGHI V.
Docket No. 57442/03-533

Table of Contents

Part 1 Project Overview

EXECUTIVE SUMMARY

Based upon the further discussions between representatives from the Bama Companies, Inc. (BAMA) and MacroSolve, Inc. along with the database design provided by Brian Davis of BAMA, MacroSolve has defined and prepared the following technical design based upon meetings on August 8th, 2001 and on August 27th, 2001, the application survey, and previously released handheld application prototype.

This proposed solution would be an invaluable tool in expediting data flow as well as communication between BAMA and their Field Service Agents. The infrastructure of this solution will allow for simplistic introduction of new mobile enterprise solutions as they arise. In addition, it will include a high-level of software flexibility that will allow for simple questionnaire design and deployment to many Field Service Agents, with centralized system management. This flexibility combined with expedited data flow will enable vendors to better assure the quality of the products being served nation-wide.

Using this model as a foundation, BAMA will quickly be able to collect and retrieve data relevant to their products. This model will also allow for rapid system expansion into other arenas, and could provide for a future revenue stream for BAMA. In addition, by laying this foundation, BAMA will quickly and cheaply be able to respond to other mobile data collection needs as they arise in the future.

PROJECT TEAM

Mike Payne	MacroSolve	Project Manager	mike@macrosolve.com	918.280.8693
Geremy Ferguson	MacroSolve	Lead Developer	geremy@macrosolve.com	918.280.8693
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Mike Slimak	BAMA		mslimak@bama.com	

MISSION VISION

To design, develop, and deploy a cost-effective handheld-based application that will provide a user-friendly interface for effectively designing surveys or questionnaires and then collecting the corresponding data. All the while including great flexibility for future enhancements.

TECHNICAL DESIGN APPROVAL

The MacroSolve Technical Design for BAMA Field Service system is accepted in full.

Client

Approved by BAMA: _____ Date: _____

MacroSolve

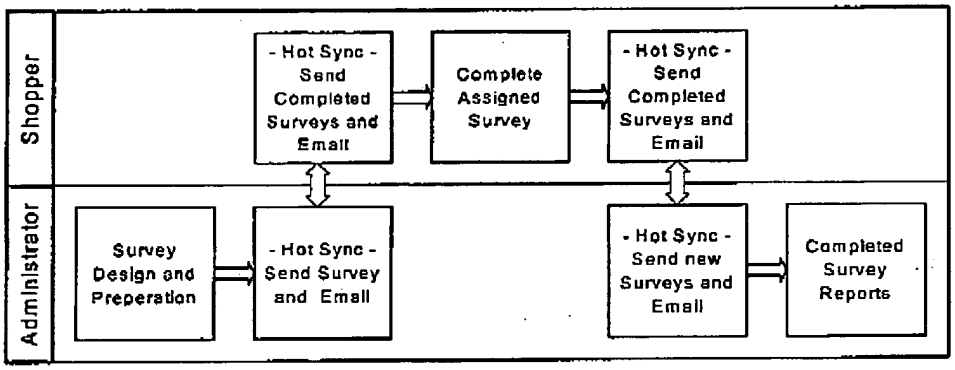
Project Manager: _____ Date: _____

Lead Developer: _____ Date: _____

Part 2 Application Overview

WORKFLOW

The figure below shows the two distinct areas of the *Field Service Survey Application*. The "Shopper" part of the workflow illustrates processes that will reside on the handheld and be designed by MacroSolve. The lower "Administrator" section illustrates processes that will take place on PCs or servers. These processes will be designed via the combined efforts of MacroSolve and BAMA.



QUESTION TYPES

Text – Answers based upon words or phrases
- Prompt Example: Describe the location of the filling.
- Palm OS object used: Field

Scale – Answers are based upon a specified range of numbers
- Prompt Example: Rate the color of the pie from 1 to 7:
- Palm OS object used: Spinner

Numeric – Only a number is accepted as a correct answer
- Prompt Example: Temperature of the pie?
- Palm OS object used: Field

Multiple Choices – Several answers are given of which one must be chosen.
- Prompt Example: Select the crust color:
- Palm Os object used: Pull Down List

Date – Date will be accessed from the handheld unit. User will have the option to change it.
- Prompt Example: Date of visit? 8/16/2001.
- Palm OS object used: Field

Yes/No – Question in which only "Yes" or "No" are appropriate answers.
- Prompt Example: Was the 2 for 1 special going on?
- Palm OS object used: Checkboxes or Buttons

Rich Text – This *Lotus Notes* defined question will need to be further examined before including it in the *Field Service Survey Application* and should be seen as a future add-on.

ELECTRONIC MESSAGING SYSTEM

The *Electronic Messaging* System provides a communication link between the handheld user and the system administrator. It will be an imperative component so that the Survey Administrator may give out assignments to shoppers as well as passing on any other important messages. It has been decided that the Palm OS Mail version 3.0 that comes with each Handspring Visor Deluxe will be the mail system used in the *Field Service Application*. The user will have to exit out of the *Field Service Application* in order to access the Palm OS Mail system and then reenter the *Field Service Application* to continue the survey process. Application details of the Palm OS Mail system can be presented at a later date if needed.

Part 3 Survey Design & Preparation Process

NARRATIVE

The design and processes that follow are at the discretion of BAMA. The MacroSolve imperative components include how the data looks and where it is located. This is further defined in *Section 8: PC Storage Specifications*.

FLOW CHART

Task Allocation: BAMA

Please provide a process flow and any other necessary information that describes the Survey Design & Preparation Process.

SCREEN IMAGES

Task Allocation: BAMA

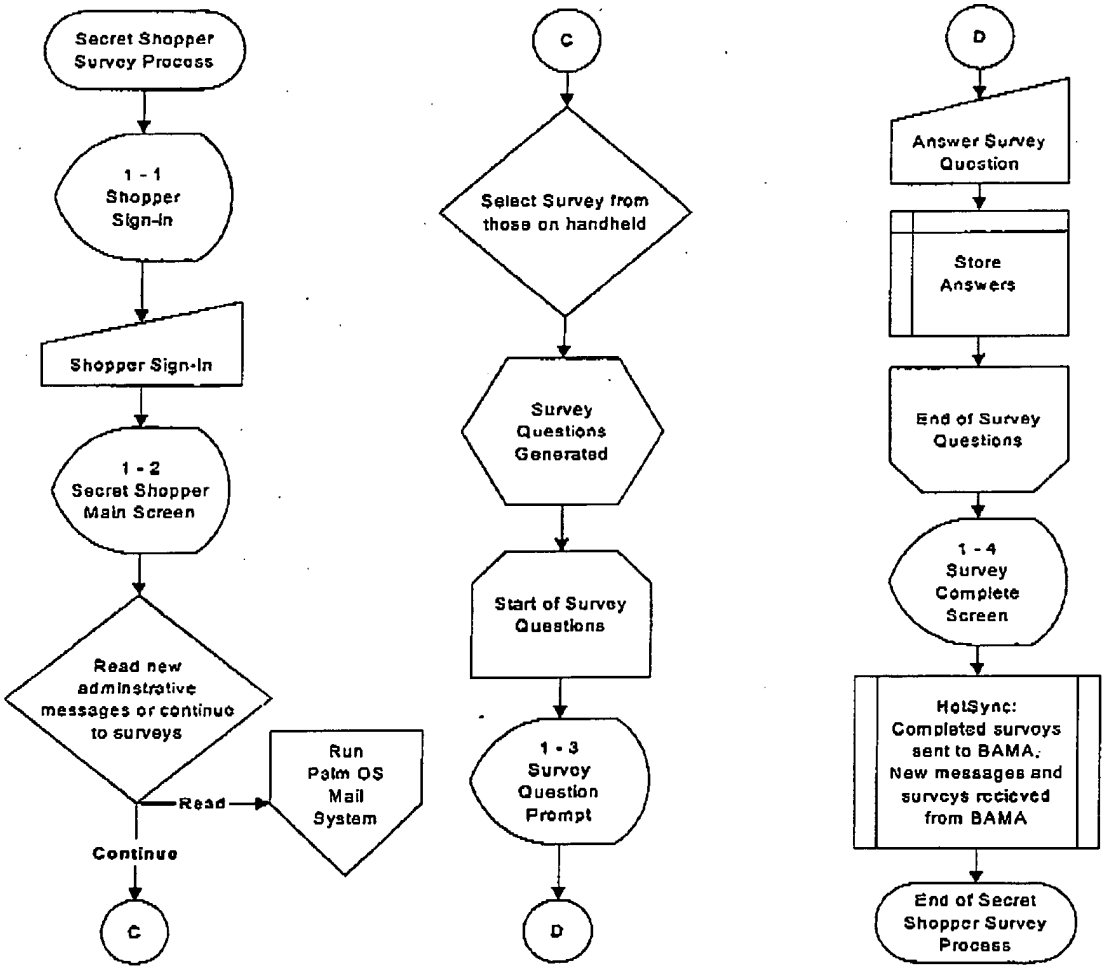
Please provide screen images and any other necessary information that describes the Survey Design & Preparation Process.

Part
4 Field Service Survey Process

NARRATIVE

The following process depicts the handheld relevant processes involved in the *Field Service Application.* This process allows the Shopper to complete surveys and allows a method by which to start the Palm OS Mail System. Also depicted are several of the screens involved in the illustrating and collecting the data. Technical details of how this data is collected along with more complete listing of the data to be collected can be found in the diagrams and tables below.

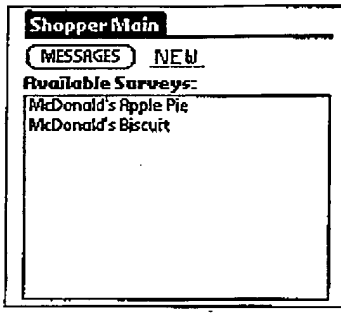
FLOW CHARTS



SCREEN DETAILS

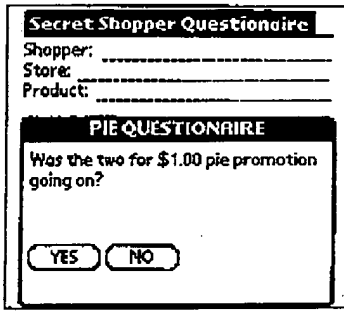
Flow 1 – 1
Screen Name Sign-in

Object Name	Object Type	Object Purpose	Table.Field
Sign-in	Field	Input Shopper Identification	answer.shopper_id
Go	Button	Go to Main Screen	N/A



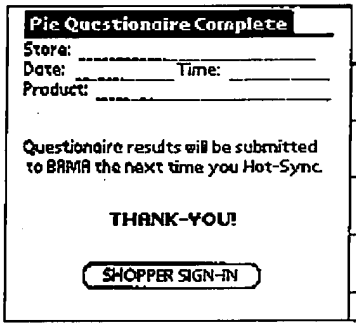
Flow 1 – 2
Screen Name Main

Object Name	Object Type	Object Purpose	Table.Field
Messages	Button	Go to Messages Screen	N/A
New	Field	Display only when new messages	N/A
Surveys	List	Display surveys present on handheld	Σ(question)



Flow 1 – 3
Screen Name Question

Object Name	Object Type	Object Purpose	Table.Field
Shopper	Field	Display Shopper ID	answer.shopper_id
Store	Field	Display Store Name and Number	answer.company_name + answer.store_num
Product	Field	Display product	answer.product_name
Question	Field	Display question	question.question_text
Answer	Various	Survey Answer to Store	answer.survey_answer



Flow 1 – 4
Screen Name Finish

Object Name	Object Type	Object Purpose	Table.Field
Store	Field	Display Store Name and Number	answer.company_name
Date	Field	Display Date product test completed	answer.date
Time	Field	Display time product test completed	answer.time
Product	Field	Display product	answer.product_name

Part 5 Conduits Processes

CONDUIT OVERVIEW

A conduit is a software plug-in for the *HotSync Server* that enables the exchange of information between Palm OS devices and corporate data stores. Conduits do not routinely require user interaction with the data and are run upon initiation of a HotSync. Once implemented, conduits will allow data to flow freely and easily between handheld units and the desired data stores, while not requiring any difficult data conversion by technical or administrative personnel.

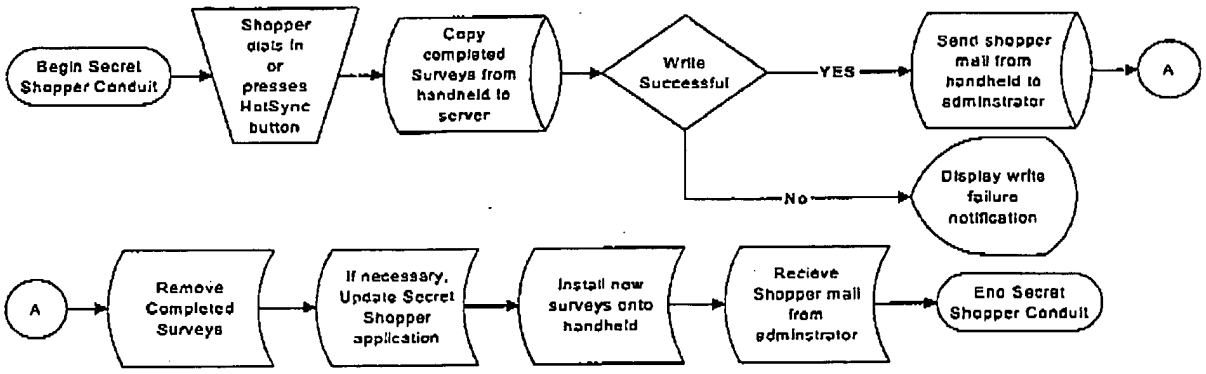
Currently, two conduits have been identified as necessary for this solution. The first, a pre-packaged conduit, included with *HotSync Server,* which allows Palm OS devices to share information with *Lotus Notes Server.* This conduit will be used to transfer messages between the handheld and the Survey Administrator client PC. The second is a custom-built conduit necessary for information exchange between the *Field Service Survey Application* and BAMA corporate survey databases. Since the conduit for the *Lotus Notes Server* comes standard with *HotSync Server,* it will not be elaborated upon here. A detailed process flow of *Lotus Notes Server* conduits may be produced, upon request, at a later date.

CUSTOM CONDUIT NARRATIVE

The MacroSolve designed conduit will take a *Lotus Domino* database and extract the necessary data components in order to create a Palm Database capable of then producing the surveys. It will also provide a method by which information will flow from the handheld unit through the *HotSync Server* to *Lotus Notes.* Below is the basic conduit process flow for information exchange between the handheld unit and the *HotSync Server.*

During the design and early testing phases of this project the conduit will be setup to interact with a Microsoft SQL 7 Server database. As the project nears completion and in the final testing and implementation phases the conduit will be setup to interact with the BAMA survey databases using the *Lotus NotesSQL 3.0* as discussed on August 27th, 2001.

FLOW CHART



Part 6

HotSync Server

HotSync Server Overview

HotSync Server enables the transfer of data between the handheld and the server. Combining *HotSync Server* with the proper conduits, will allow a shopper to easily transfer information, i.e. completed surveys and messages, from the handheld into the corporate network where the MacroSolve designed conduit and the *Lotus Notes* conduit will reformat the data so that it can be interrupted by the *Lotus Notes* system. *HotSync Server* will allow the *Field Service Survey Application* to be updated with out requiring the shopper to do anything other than HotSync the unit. *HotSync Server* will also provide for easy backup and restoration of handheld data should they be necessary.

HotSyncing can be accomplished in several ways.

1. *Modem HotSync* - The preferred method for the *Field Service Survey Application* is a HotSync connection via a Handspring Springboard Modem. After inserting the modem module into the Handspring Visor and then connecting the modem to a typical phone jack, the shopper must then initiate the modem HotSync by starting the Palm OS standard HotSync application on the handheld, and selecting a properly setup modem connection that will connect the shopper to the BAMA corporate network through a *RAS (Remote Access Server).*

2. *Desktop HotSync* - Pressing the HotSync button on the handheld cradle will initiate a direct cable connection to a desktop PC. This connection only works assuming that the cradle is connected to a PC that then has a network connection to the BAMA corporate network or that the PC has a modem that can dial out and connect to a server that resides on the BAMA corporate network.

3. *Infrared HotSync* - Since the *Handspring Visor Deluxe* has an Infrared port, it can synchronize with a desktop computer equipped with an infrared (IR) port that supports the IrCOMM implementation of the Infrared Data Association (IrDA) standard. The user would set up the HotSync Manager to use the desktop's IR port and selects the IR option in the HotSync client on the handheld.

When a HotSync is initiated several functions are carried out. First, a list of creator IDs on the handheld is compared to a list of conduits registered to the various creator IDs. When corresponding IDs are found, the conduit for that ID is executed and information is exchanged. In the case of the *Field Service Survey Application,* the MacroSolve designed conduit will first check for new surveys or new versions of surveys to upload to the handheld. When a newer version of a survey is placed on the handheld, the old version is removed. In order to retire a survey or take it out of circulation and "00" will be used as the version number. This "00" will tell the conduit to remove the existing handheld survey, but not to upload a different version of the survey.

Once the surveys have been uploaded, updated, or removed, any answer databases located on the handheld are removed from the handheld and placed into BAMA corporate survey answer database. Once these *Field Service Survey Application Conduit* sequences are complete, HotSync will continue through its list of conduits until all have been completed. Using the HotSync technology it is possible to control how information is exchanged between the BAMA corporate network and each shopper's handheld.

HOTSYNC SERVER INSTALLATION

Installation and setup of the server software will require the following procedures:

1. Install Palm *HotSync Server* software
2. Install *Lotus Notes* conduit
3. Set up Shopper profiles
4. Test Palm *HotSync Server* software *Lotus Notes* conduit
5. Distribute Palm OS User Setup Program and Palm *HotSync Server* connection information
6. Run the Palm OS User Setup Program for each Shopper
    a. The Palm OS User Setup Program installs the Palm OS client and desktop proxy agent and allows entry of the Palm *HotSync Server* connection information. This will be an optional function depending upon whether or not desktop connectivity from Shopper to BAMA is desired. The User Setup Program can be distributed via the corporate intranet or via enterprise system management tools that proactively distribute software to the desktop. Each Palm handheld user will run the User Setup Program followed by the familiar desktop synchronization process to install the Palm OS client on the handheld.
7. Install the Palm OS client on each Shopper's handheld

Part 7 Handheld Storage Specifications

NARRATIVE

This section describes the basic design of the database tables, relationships between the tables, and detailed definitions of the table fields, as they will appear on the handheld unit. Both the Question and Answer tables for each survey will reside separately in its own file while on the handheld. Each file will be named using the following naming conventions discussed below.

QUESTION TABLE DESIGN

Database Name: "Survey Name" + "Survey Version".pdb
Database Type: SURV
Database Creator: BAMA
Database Purpose: Stores the Survey Question Information on the Handheld

R	Field #1	Field #2	Field #3	Field #4	Field #5	Field #6	Field #7+
0	Company Name	Product Name	Survey Version	N/A	N/A	N/A	N/A
1	Q Num	Q Type	L Num	Q Text	Default A	Instructions	L Value
2	Q Num	Q Type	L Num	Q Text	Default A	Instructions	L Value
3	Q Num	Q Type	L Num	Q Text	Default A	Instructions	L Value
...	...	...	...	...	...	...	...

ANSWER TABLE DESIGN

Database Name: "Survey Name" + "Survey Version" + "Store Number".pdb
Database Type: ANSR
Database Creator: BAMA
Database Purpose: Stores the Survey Answers on the Handheld

R	Field #1	Field #2	Field #3	Field #4	Field #5	Field #6	Field #7
0	Company	Product Name	Survey Version	Shopper ID	Store Num	Date	Time
1	Q Num	Survey Answer	N/A	N/A	N/A	N/A	N/A
2	Q Num	Survey Answer	N/A	N/A	N/A	N/A	N/A
3	Q Num	Survey Answer	N/A	N/A	N/A	N/A	N/A
...	...	...	...	...	...	...	...

TABLE RELATIONSHIPS

The relationship between the Question and Answer Database tables is based upon:

- Survey Name
- Survey Version
- Question Number

QUESTION FIELDS DEFINED

Name	Type	Length	Purpose
Company_Name	String	25	Name of the company where the survey is being taken
Product_Name	String	25	Name of the product being surveyed
Survey_Version	Integer	5	Version number of the survey
Question_Number	Integer	5	Number of the question in the survey
Question_Type	String	25	Type of question in the survey (see *Part 2: Question Types)*
List_Number	Integer	5	If the question type is "Multiple Choice" this will be the number of possible values
Question_Text	String	150	Actual text of the question
Default_Answer	String	25	Default answer for the question
Instructions	String	150	Any instructions that are needed
List_Value	String	25	A possible "Multiple Choice" answer, a new field will be appended to the database for each multiple choice answer

ANSWER FIELDS DEFINED

Name	Type	Length	Purpose
Company_Name	String	25	Name of the company where the survey is being taken
Product_Name	String	25	Name of the product being surveyed
Survey_Version	Integer	5	Version number of the survey
Shopper_ID	String	10	Unique ID of shopper
Store_Number	Integer	10	Unique store ID number
Survey_Date	Integer	8	Date survey completed
Survey_Time	Integer	8	Time survey completed
Question_Number	Integer	5	Number of the question in the survey
Survey_Answer	String	150	Answer to the survey question

Part 8 PC Storage Specifications

NARRATIVE

This section describes the detailed definitions of the table fields, as they will appear on the Survey Administrator Client or on the main server. The database files will be flat and un-normalized. The conduit (*See Section 5: Conduit Processes)* will take the data in a given table and set it up in the Palm OS format. In a similar fashion the conduit will take the *Answer Palm Database*, and set it up so that it can be placed into the BAMA corporate survey databases. As of the MacroSolve – Brian Davis meeting on August 27, 2001, it was decided that two large tables would house the Question and Answer tables' separately.

During the aforementioned meeting, Mr. Davis stated that he wanted to combine the "Company_Name" and "Product_Name" fields into on field called "Survey_Name". This was done but during the revision and review processes of this document, it was decided that for future enhancements and to enable the ability to access each piece of data separately (i.e. if only the "Product_Name" was needed and not the entire "Survey_Name") that the two fields should remain separated from one another. If requested by BAMA, it is possible for the conduit to combine the "Company_Name" and "Product_Name" fields into one field named "Survey_Name" when the Answer table is transferred from the handheld into the BAMA corporate survey databases.

QUESTION FIELDS SPECIFIED

Name	Type	Length	Purpose
Company_Name	String	25	Name of the company where the survey is being taken
Product_Name	String	25	Name of the product being surveyed
Survey_Version	Integer	5	Version number of the survey
Question_Number	Integer	5	Number of the question in the survey
Question_Type	String	25	Type of question in the survey (see *Part 2: Question Types)*
List_Number	Integer	5	If the question type is "Multiple Choice" this will be the number of possible values
Question_Text	String	150	Actual text of the question
Default_Answer	String	25	Default answer for the question
Instructions	String	150	Any instructions that are needed
List_Value	String	25	A possible "Multiple Choice" answer, a new field will be appended to the database for each multiple choice answer

ANSWER FIELDS SPECIFIED

Name	Type	Length	Purpose
Company_Name	String	25	Name of the company where the survey is being taken
Product_Name	String	25	Name of the product being surveyed
Survey_Version	Integer	5	Version number of the survey
Shopper_ID	String	10	Unique ID of shopper
Store_Number	Integer	10	Unique store ID number
Survey_Date	Integer	8	Date survey completed
Survey_Time	Integer	8	Time survey completed
Question_Number	Integer	5	Number of the question in the survey
Survey_Answer	String	150	Answer to the survey question

Part
9 Future Components

SCHEDULING

The Scheduling component mentioned in the *Application Survey* was removed for the *Technical Document's* scope of *Field Service* Survey Project. Adding the Scheduling component back into future versions could enable the Survey Administrator to send a message to a specified user that would appear as appointment in the Schedule component rather than just a message in the Palm OS Mail System as has been set up in this document.

PROFILES

A Profile component was mentioned in the *Application Survey*. Based upon a Shopper's unique identification number, the Profile component would allow the individual user to easily update personal information (i.e. address, phone, etc.) without having to call in or compose a full-length message to the Survey Administrator.

HARDWARE

Selecting the Handspring Visor Deluxe allows a great deal of flexibility in software and hardware. As mention in the scope meeting between MacroSolve and BAMA on August 8, 2001, the Visor's Springboard port allows for the addition of many different but useful pieces of hardware.

Those hardware modules that have been discussed are:

- Cameras
- Temperature Probes
- Wireless Connectivity Modules

Part 10 Investment Summary

SOFTWARE AND SERVICES

Part Number	Description	Investment
MS-APPDEV	Application Development per approved BAMA Technical Design – 1-3	$ 16,500.00
MS-ASDISC	Application Survey Discount	- $ 1,500.00
	TOTAL SOFTWARE AND SERVICES	$ 15,000.00

Terms:

- Quote expires: 30 Days from receipt
- Travel and allowance: Billed as actual per occurrence
- Payment: 50% Start/50% Delivery
- Order Cancellation: Orders cancelled after PO has been issued are subject to 15% surcharge + applicable manufacturers restock fee.
- Hardware Warranty: Manufacturers warranty pass through
- Shipping: Billed as actual per occurrence to client
- This quotation should be considered **proprietary and confidential**

HARDWARE AND INFRASTRUCTURE

Proposed Handheld Unit: Handspring Visor™ Deluxe

The Handspring Visor™ Deluxe is the handheld computer that will best fit the Field Service Application requirements. It features an expandability port that will allow for easy addition of a modem or camera. Each Visor™ Deluxe features 8MB of internal memory, uses two AAA batteries and includes *Field Service Application* required HotSync USB cradle, Stylus, Palm Desktop software, and Leather slip-case.
Suggested Retail Price: $199/unit

Proposed Handheld Modem: 56K Thinmodem-Plus

The 56K Thinmodem-Plus provides a fast 56k/v.90 wireline modem while not requiring an additional battery unit or consuming additional battery power from the Visor™ Deluxe's internal power supply. This will mean longer Visor™ Deluxe battery life when compared to certain modems and will not add any substantial weight or size to the Visor™ Deluxe unit. It also provides 8MB of Flash Memory in the same card unit, which will be necessary if a nonvolatile data backup solution is also desired. This solution would add a greater level of fault tolerance and data reliability for the proposed handheld units.
Suggested Retail Price: $149.95/unit

Proposed HotSync Server: Palm HotSync Server

HotSync is the foundation server technology that powers an extended information infrastructure - enabling connection and management of handheld devices being used in the field by Field Service Agents. HotSync works in both wired and wireless environments in batch and real-time modes to connect and manage handheld devices and applications.

User Licenses	Cost
5	$2,111
50	$11,872
250	$24,425
500	$30,339

Part 11 Schedule

Project Schedule will be provide upon approval of Technical Design.

Part 12 Glossary

A Abbreviation for "Answer(s)"

Button Buttons display a text label in a box. The default style for a button is a text string centered within a rounded rectangle. Buttons have rounded corners unless a rectangular frame is specified. A button without a frame inverts a rounded rectangular region when pressed.

When the user taps a button with the pen, the button highlights until the user releases the pen or drags it outside the bounds of the button.

Checkbox Check boxes display a setting, either on (checked) or off (unchecked). Touching a check box with the pen toggles the setting. The check box appears as a square, which contains a check mark if the check box's setting is on. A check box can have a text label attached to it; selecting the label also toggles the check box. Push buttons and check boxes can be arranged into exclusive groups; one and only one control in a group can be on at a time.

Creator, Database This is a field stored in the Palm OS database header that is 4 bytes in size. The system uses this field to distinguish application databases from data databases and to associate data databases with the appropriate application.

Field A field object displays one or more lines of text.

L Abbreviation for "List(s)"

List The list object appears as a vertical list of choices in a box. The current selection of the list is inverted.

Pull Down List A pull down list is a combination of a Palm OS selector trigger and a Palm OS list.

Q Abbreviation for "Question(s)"

R Abbreviation for "Record(s)"

S Abbreviation for "Survey(s)"

Selector Trigger A selector trigger displays a text label surrounded by a gray rectangular frame. If the text label changes, the width of the control expands or contracts to the width of the new label.

Spinner A MacroSolve designed object that is the summation of a Palm OS field and two Palm OS buttons. Essentially with each press of the button the corresponding field is either incremented or decremented.

Type, Database This is a field stored in the Palm OS database header that is 4 bytes in size. The system uses this field to distinguish application databases from data databases and to associate data databases with the appropriate application.